

In contrast, Kohn describes Multiple-Agent Hybrid Control Architecture. The Multiple-Agent Hybrid Control Architecture “functions as real-time ‘middleware’ to synchronize distributed legacy or new applications.” *See Kohn, Col. 11, lines 31-33.* However, Kohn does not teach each element of claim 1 because Kohn fails to describe a method of enhancing a production recipe by “annotating one or more actions in the production recipe with *a desired intention for the action.*”

Independent claim 3 is directed to a computerized method of generating a production recipe and recites “generating through computer automated operations a recipe comprising a set of actions and *the purpose of the underlying process.*” In contrast, Kohn describes Multiple-Agent Hybrid Control Architecture. However, Kohn does not teach each element of claim 3 because Kohn fails to describe a production recipe “comprising a set of actions and *the purpose of the underlying process.*”

Independent claim 6 is directed to a computerized method for controlling a production process and recites “modifying a recipe for a *batch processing* situation using the data stored in the knowledge repository.” In contrast, Kohn describes Multiple-Agent Hybrid Control Architecture. However, Kohn does not teach each element of claim 6 because Kohn fails to describe batch processing or “modifying a recipe for a *batch processing* situation.”

Independent claim 9 is directed to a computerized system and recites “a Knowledge Builder,” “a Structured Knowledge Repository,” and “a Decision Maker.” In contrast, Kohn describes Multiple-Agent Hybrid Control Architecture. The Multiple-Agent Hybrid Control Architecture is a collection of agents and each agent consists of six components. *See Figure 2 of Kohn.* However, Kohn does not teach each and every claim element arranged as in claim 9 because Kohn fails to teach a computerized system having a Knowledge Builder, a Structured Knowledge Repository, and a Decision Maker.

Independent claim 23 is directed to a computer-readable medium having computer-executable instructions for a method of managing a production process. Independent claim 23 recites “generating an advanced recipe comprising a set of actions and the purpose of the underlying process.” In contrast, Kohn describes Multiple-Agent Hybrid Control Architecture. However, Kohn does not teach each element of claim 23 because Kohn fails to describe

“generating an advanced recipe comprising a set of actions *and the purpose of the underlying process.*”

Claims 2, 4-5, 7-8, 10-22, and 24, are dependent on claims 1, 3, 6, 9, and 23, respectively, and are patentable over Kohn for the reasons argued above, plus the elements in the claims.

For example, dependent claim 2 recites “annotating the one or more actions with a desired state for the action.” Kohn fails to describe annotating actions with a desired state. In another example, dependent claim 8 recites that “the recipe contains steps and purposes.” Kohn fails to describe a recipe containing purposes. In yet another example, dependent claim 10 recites that “the recipe is for a batch process.” As stated above, Kohn fails to describe batch processing.

In addition, the Office Action indicates that claim 18 is rejected under 35 USC 102; however, the Office Action fails to give specific reasons for the rejection of claim 18. Furthermore, the Office Action acknowledges that Kohn does not teach abstraction-decomposition space techniques. The applicant assumes that the inclusion of claim 18 in the list of claims rejected under 35 USC 102 is merely a typo.

Thus, the Applicant respectfully submits that the Office Action has not made a *prima facie* case for anticipation because Kohn does not teach or suggest all the elements of claims 1-24.

### §103 Rejection of the Claims

Claim 18 was rejected under 35 USC § 103(a) as being unpatentable over Kohn et al. in view of the Applicant’s specification.

The Office Action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. *In re Sang Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002). The Office Action stated “it would have been obvious of one of ordinary skill in the art at the time of the invention to use the teachings of APA to satisfy analysis requirements as set forth in a learning environment to achieve goal setting functionality,” which is a mere conclusory statement of subjective belief, so Applicant respectfully submits that the Office Action has not provided objective evidence for a suggestion

or motivation to combine Kohn with the Applicant's specification (which is referred to by the Office as APA).

Furthermore, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP § 2143. The Examiner must avoid hindsight. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990).

Thus, the Applicant respectfully submits that the Office Action did not make out a *prima facie* case of obviousness for claim 18.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((612) 349-9592) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743 .

Respectfully submitted,

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Date Oct. 11, 2002

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 11 day of October, 2002.

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